

Serial No.: 09/815,567

Filed: March 23, 2001

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (previously presented) A flexible, kink-resistant introducer sheath comprising:
an inner tube extending to a distal end;
a wire coil wound around said inner tube extending to an end spaced proximally from said inner tube distal end;
a first outer tube disposed around said wire coil and said inner tube therewithin to a first outer tube distal end spaced proximally from said wire coil distal end such that a distal end portion of said wire coil extends distally therebeyond; and
at least a second outer tube disposed around said wire coil and said inner tube therewithin extending distally from said first outer tube distal end and covering said distal end portion of said wire coil and extending slightly beyond said distal end of said inner tube,
said first outer tube being of a material having a relatively hard durometer, and said second outer tube being of a material of a substantially softer durometer than said material of said first outer tube.
2. (previously presented) The introducer sheath according to claim 1, wherein said first and second outer tubes are bonded to each other and to said wire coil, and to said inner tube between windings of said wire coil.
3. (previously presented) The introducer sheath according to claim 2, wherein an outwardly facing surface of said inner tube has been roughened to enhance bonding thereto of said first and second outer tubes.
4. (previously presented) The introducer sheath according to claim 2, wherein said bonding is heat bonding.

Serial No.: 09/815,567

Filed: March 23, 2001

5. (previously presented) The introducer sheath according to claim 1, wherein a radiopaque marker band is affixed to said wire coil distal end within said second outer tube.

6. (previously presented) The introducer sheath according to claim 1, wherein said second outer tube is polymeric and contains radiopaque filler.

7. (previously presented) The intravascular sheath according to claim 6, wherein said second outer tube contains between about 20% and 85% by weight of radiopaque filler particles.

8. (previously presented) The introducer sheath according to claim 6, wherein said second outer tube contains about 80% by weight of radiopaque filler particles.

9. (previously presented) The introducer sheath according to claim 1, wherein said first outer tube is substantially free of radiopaque filler.

10. (previously presented) The introducer sheath according to claim 1, wherein said second outer tube comprises a material having a durometer of at least 5 D lower than that of the material of the first outer tube.

11. (previously presented) The introducer sheath according to claim 10, wherein said first outer tube comprises a material having a durometer of about 56D to 58D.

12. (previously presented) The introducer sheath according to claim 1, wherein said second outer tube comprises a material having a durometer of between about 10D and 75D.

13. (previously presented) The introducer sheath according to claim 12, wherein said second outer tube comprises a material having a durometer of about 39D.

Serial No.: 09/815,567

Filed: March 23, 2001

14. (canceled)

15. (previously presented) The introducer sheath according to claim 1, wherein said wire coil comprises flat wire.

16. (previously presented) The introducer sheath according to claim 1, wherein a distal tip region of the sheath is arcuate.

17. (previously presented) The introducer sheath according to claim 16, wherein said arcuate distal tip region has a length of about 1 cm or more.

18. (previously presented) The introducer sheath according to claim 16, wherein said arcuate distal tip region extends about an angle of about 90°.

19. (previously presented) The introducer sheath according to claim 1, wherein said wire coil extends for a length of about five millimeters beyond said distal end of said first outer tube.

20. (previously presented) The introducer sheath according to claim 1, wherein said inner tube is unitarily formed.

21. (canceled)

22. (new) A flexible, kink resistant introducer sheath comprising:
an inner tube extending to a distal end;
a wire coil wound around said inner tube extending to a wire coil distal end spaced proximally from said inner tube distal end, said wire coil comprising a plurality of coil turns, each coil turn being free of interference from another coil turn;
a first outer tube disposed around said wire coil and said inner tube to a first outer tube distal end spaced proximally from said wire coil distal end; and

Serial No.: 09/815,567

Filed: March 23, 2001

a second outer tube extending distally from said first outer tube distal end and disposed around and covering said distal end portion of said wire coil and said inner tube and extending slightly therebeyond;

said first outer tube being of a material having a relatively hard durometer, and said second outer tube being of a material of a durometer softer than the durometer of the first outer tube.

23. (new) An introducer sheath comprising:

an inner tube extending to a distal end;

a wire coil wound around said inner tube extending to an end spaced proximally from said inner tube distal end, said wire coil comprising a plurality of coil turns, each turn being free from being interwoven with another coil turn;

a first outer tube disposed around said wire coil and said inner tube to a first outer tube distal end spaced proximally from said wire coil distal end; and

at least a second outer tube disposed around said wire coil and said inner tube extending distally from said first outer tube distal end and covering said distal end portion of said wire coil, said first outer tube being of a material having a relatively hard durometer, and said second outer tube being of a material having a softer durometer than said material of said first outer tube.